AMENDMENTS TO THE SPECIFICATION:

Please substitute the following amended paragraph on page 23, lines 13-22, continuing on to page 24, line 1, for the original paragraph as filed:

I. Construction of a segment of bacterial plasmid DNA that contains the change of interest and extensive homology to the target. Generation of the IgG1-GFP fusion knock-in construct is described below. The VDJ variable regions of the IgG1 constant chain are far upstream (5') of this area. Immediately upstream of this area are the IgM and IgD constant regions. Downstream to this area are the constant regions for IgG2a, IgG2b, IgG3, IgE, and IgA. The exons CH1, CH2 and G1 are spliced together to make the constant region of the secreted form. To make the membrane bound form, CH1, CH2, G1 (except the last 2 amino acids), TD1, and TD2 are spliced together. In the targeting vector, GFP is fused in-frame at the end of the G1 exon with a five- amino-acid linker of Gly-Gly-Ser-Gly-Gly (SEQ ID NO: 2) in-between. The membrane bound form splices out the last two amino acids of G1 and thus the entire GFP. Therefore, GFP will be fused only to the secreted form.

Please enter the Substitute Sequence Listing submitted herewith into the present application after the specification and before the claims.

AMENDMENTS TO THE CLAIMS:

Please substitute currently amended claim numbers 3, 6, 11, 17, 19 and 22 for the previously presented claims having the same claim numbers.

Please cancel claim numbers 5, 33-51, 53 and 55 without prejudice or disclaimer.

1. (previously presented) A genetically-modified non-human mammal containing a single vector comprising a fusion polynucleotide, said fusion polynucleotide comprising a nucleic acid encoding an immunoglobulin component selected from the group consisting of the kappa immunoglobulin light chain, the lambda immunoglobulin light chain, an immunoglobulin heavy chain, and any combination thereof, and a nucleic acid encoding at least two detectable proteins, wherein said non-human mammal is capable of expressing at least two detectable proteins fused with said immunoglobulin component wherein an antibody secreted by an immune cell of said genetically-modified non-human mammal comprises said at least two detectable proteins.

2. (previously presented) The genetically-modified non-human mammal of claim 1 wherein said at least two detectable proteins encoded by the fusion polynucleotide are present at the C-terminus of the gene product of said fusion polynucleotide.

3. (currently amended) The genetically-modified non-human mammal of claim 2 wherein ~~a polynucleotide~~ said nucleic acid encoding said at least two detectable proteins present at the C-terminus of the gene product of said fusion polynucleotide ~~are~~ is located in exon G1.

4. (previously presented) The genetically-modified non-human mammal of claim 1 wherein said at least two detectable proteins are present at the C-terminus of the gene product of said fusion polynucleotide with a flexible linker peptide located between the at least two detectable proteins and the immunoglobulin component.

5. (canceled)

6. (currently amended) The genetically-modified non-human mammal of claim 1 wherein said immunoglobulin heavy chain ~~gene~~ is selected from the group consisting of IgG, IgM, IgD and IgA.

7. (previously presented) The genetically-modified non-human mammal of claim 1 wherein an antibody secreted by an immune cell of said genetically-modified mammal comprises at least two detectable proteins in the heavy chain of said antibody.

8. (previously presented) The genetically-modified non-human mammal of claim 1 wherein an antibody secreted by an immune cell of said genetically-modified mammal comprises at least two detectable proteins in the light chain of said antibody.

9. (previously presented) The genetically-modified non-human mammal of claim 1 wherein an antibody secreted by an immune cell of said genetically-modified mammal comprises at least two detectable proteins in the heavy chain and at least two detectable proteins in the light chain of said antibody.

10. (previously presented) The genetically-modified non-human mammal of claim 1 wherein one of the at least two detectable proteins is capable of quenching fluorescence.

11. (currently amended) The genetically-modified non-human mammal of claim 1 wherein at least one of the at least two detectable proteins is an autofluorescent protein, a visibly-detectable protein, an enzymatically active protein, or a protein capable of interacting with another molecule to produce a detectable product~~, separated from the immunoglobulin portion of the polypeptide by one or more linker sequences~~.

12. (previously presented) The genetically-modified non-human mammal of claim 11 wherein said at least one of the at least two detectable proteins is an autofluorescent protein.

13. (previously presented) The genetically-modified non-human mammal of claim 11 wherein said autofluorescent protein is selected from the group consisting of green fluorescent protein, cyan fluorescent protein, yellow fluorescent protein, red fluorescent protein, and a fluorescent analog or fragment of any of the foregoing.

14. (previously presented) The genetically-modified non-human mammal of claim 12 wherein said autofluorescent protein is green fluorescent protein.

15. (previously presented) The genetically-modified non-human mammal of claim 11 wherein said at least one detectable protein is a combination of an autofluorescent protein and an enzymatically-active protein.

16. (previously presented) The genetically-modified non-human mammal of claim 15 wherein said at least one detectable protein is a combination of green fluorescent protein and alkaline phosphatase.

17. (currently amended) A genetically-modified immune cell having a single vector comprising a fusion polynucleotide, said fusion polynucleotide comprising a nucleic acid encoding an immunoglobulin component selected from the group consisting of the kappa immunoglobulin light chain, the lambda immunoglobulin light chain, an immunoglobulin heavy chain, and any combination thereof, ~~and~~ a nucleic acid encoding at least two detectable proteins, and a nucleic acid encoding a flexible linker peptide ~~and wherein a flexible linker peptide is~~ located between the nucleic acid encoding the immunoglobulin component and the nucleic acid encoding the at least two detectable proteins, and wherein said immune cell is capable of expressing at least two detectable proteins fused with said immunoglobulin component, with the flexible linker peptide between the immunoglobulin component and the at least two detectable proteins, wherein antibodies secreted by said genetically-modified immune cell comprise said at least two detectable proteins.

18. (previously presented) The genetically-modified immune cell of claim 17 wherein said at least two detectable proteins are present at the C-terminus of the gene product of said fusion polynucleotide.

19. (currently amended) The genetically-modified immune cell of claim 17, wherein ~~a polynucleotide~~ said nucleic acid encoding said at least two detectable proteins present at the C-terminus of the gene product of said fusion polynucleotide is located in exon G1.

20. (canceled)

21. (canceled)

22. (currently amended) The genetically-modified immune cell of claim 17 wherein said immunoglobulin heavy chain ~~gene~~ is selected from the group consisting of IgG, IgM, IgD and IgA.

23. (previously presented) The genetically-modified immune cell of claim 17 wherein an antibody secreted by said immune cell comprises at least two detectable proteins in the heavy chain of said antibody.

24. (previously presented) The genetically-modified immune cell of claim 17 wherein an antibody secreted by said genetically-modified immune cells comprises at least two detectable proteins in the light chain of said antibody.

25. (previously presented) The genetically-modified immune cell of claim 17 wherein an antibody secreted by said genetically-modified immune cells comprises at least two detectable proteins in the heavy chain and at least two detectable proteins in the light chain of said antibody.

26. (previously presented) The genetically-modified immune cell of claim 17 wherein one of the at least two detectable proteins is capable of quenching fluorescence.

27. (previously presented) The genetically-modified immune cell of claim 17 wherein at least one of the at least two detectable proteins is an autofluorescent protein or peptide, a visibly-detectable protein or peptide, an enzymatically active protein or peptide, or a protein or peptide capable of interacting with another molecule to produce a detectable product.

28. (previously presented) The genetically-modified immune cell of claim 27 wherein said at least one of the at least two detectable proteins is an autofluorescent protein.

29. (previously presented) The genetically-modified immune cell of claim 28 wherein said autofluorescent protein is selected from the group consisting of green fluorescent protein, red fluorescent protein, and a fluorescent analog or fragment of any of the foregoing.

30. (original) The genetically-modified immune cell of claim 29 wherein said autofluorescent protein is green fluorescent protein.

31. (previously presented) The genetically-modified immune cell of claim 27 wherein said at least one detectable protein is a combination of an autofluorescent protein and an enzymatically-active protein.

32. (original) The genetically-modified immune cell of claim 31 wherein said at least one detectable protein is a combination of green fluorescent protein and alkaline phosphatase.

33. (canceled)

34. (canceled)

35. (canceled)

36. (canceled)

37. (canceled)

38. (canceled)

39. (canceled)

40. (canceled)

41. (canceled)

42. (canceled)

43. (canceled)

44. (canceled)

45. (canceled)

46. (canceled)

47. (canceled)

48. (canceled)

49. (canceled)

50. (canceled)

51. (canceled)

52. (previously presented) A genetically-modified non-human mammal capable of producing a detectably-labeled antibody in response to immunization by an antigen, the genome of said non-human mammal comprising at least one fusion polynucleotide comprising a nucleic acid encoding at least two detectable proteins and a nucleic acid encoding an immunoglobulin component selected from the group consisting of the kappa immunoglobulin light chain, the lambda immunoglobulin light chain, an immunoglobulin heavy chain, and any combination thereof, wherein an antibody secreted by an immune cell of said genetically-modified non-human mammal comprises said at least two detectable proteins.

53. (canceled)

54. (previously presented) The method of either one of claims 11 or 27, wherein said protein capable of interacting with another molecule to produce a detectable product is selected from the group consisting of an intein, a biotin-binding subunit of streptavidin or avidin, a His tag, or a chitin-binding domain, or any combination thereof, and wherein said protein capable of interacting with another molecule to produce a detectable product may also be used to facilitate purification of said detectable product.

55. (canceled)